Department of Health and Human Services Public Health Service Bemidji Area Indian Health Service Bemidji, Minnesota 56601

Refer to: OEHE/EHSS

Bemidji Area Indian Health Service Circular No. 02-01

MERCURY USE AND POLLUTION PREVENTION POLICY ISSUANCE

Sec.

- 1. Purpose
- 2. Background
- 3. Policy Statement
- 4. IHS Functional Responsibility
- Effective Date
- 1. <u>PURPOSE</u>. To establish a Bemidji Area Indian Health Service (BAIHS) policy on the purchase, use, maintenance and disposal of mercury containing medical equipment and supplies with an emphasis on replacement and eventual elimination of mercury from the healthcare environment. A reduction of mercury in health care settings will have a significant impact on reducing occupational exposures and mercury levels in the environment

2. BACKGROUND

Mercury is a hazardous heavy metal that occurs naturally in the environment in both inorganic (elemental) and organic forms. Human activity has increased the amounts of mercury in air, soil and water. In water or soil, microorganisms can convert inorganic mercury into the more toxic organic form finding its way into the food chain. Exposure to mercury may occur via inhalation, ingestion or through the skin. Mercury is a neurotoxin and can damage the brain and central nervous system.

Mercury spills in hospitals and healthcare settings may occur and place employees, patients and visitors at risk of mercury exposure. It is for this reason that the American Hospital Association and U.S. Environmental Protection Agency have completed a Memorandum of Understanding to virtually eliminate mercury use in hospitals by 2005, thus eliminating it from the waste stream.

The Bemidji Area Indian Health Service has no formal policy requiring the reduction or replacement of mercury containing devices or equipment in healthcare settings. Given

the hazardous nature of elemental mercury, the availability of alternative products and devices and the significant health problems that may result from exposure, it is prudent for the Bemidji Area to take all actions possible to reduce or eliminate the potential for exposure to mercury.

- **POLICY STATEMENT**: The BAIHS strongly endorses efforts to eliminate the exposure of patients, visitors and staff to mercury via mercury containing items and devices. The BAIHS programs shall follow all prescribed regulations pertaining to mercury use and handling of mercury waste and seek to reduce the use of mercury in healthcare settings, where possible, by evaluating acceptable alternative products prior to purchase.
- 4. <u>IHS FUNCTIONAL RESPONSIBILITY</u>: This policy shall be promoted in a multidisciplinary effort by the BAIHS IHS-Environmental Health Services Program, procurement departments and other IHS direct care programs as warranted. BAIHS healthcare personnel shall encourage and assist Tribal healthcare providers in complying with this policy as requested.

Where possible, acceptable alternatives to mercury or mercury-containing devices, devices, items and reagents shall be purchased and utilized. Some examples of replacement items are as follows:

Mercury product Replacement

Thermometers	Electronic, infrared aural, Alcohol
Esophogeal Dilator	Tungsten-weighted dilator
Feeding Tubes	All plastic-tungsten-weighted
Immune Saline with Thimerosol	Thimerosol-free saline
Mercurochrome	Neosporin, Mycin
Thimerosol	Thimerosol-free bactericides
Dental Amalgam*	Non-mercury amalgams
Batteries	Nickel-Cadmium, other rechargeables
Sphygmomanometer	Aneroid Mechanical Sphygmo.
Fluorescent Lamps	Low Hg lamps

^{*}Cost considerations may prohibit a universal replacement of silver-mercury amalgams with more expensive alternatives. Dental professionals must evaluate the cost-effectiveness vs. health care provision issue.

Other items to consider, for which there may be acceptable replacements, may include: thermostats, pressure gauges, switches and Hg fixatives and preservatives. All new and replacement equipment purchased shall be mercury free or low mercury. Purchasing agents shall review all purchase requests to assure all items are no/low Hg.

In those locations where mercury may have accumulated over the years, i.e. floor drains, sink traps, etc., the Area has a mercury detection device available for use by trained environmental health personnel. The device may be used to determine if mercury spill clean-up activities have been effective in lowering levels of exposure. Contact Environmental Health Services Section personnel to arrange for use of this instrument and direction and assistance in matters of disposal. All spills of mercury in Area facilities shall be addressed as per existing spill control/clean-up policy and procedure. Disposal/reclamation of mercury or mercury-containing substances shall be conducted in accordance with state and federal regulations. Environmental Health Services Section staff may be consulted for advice on proper disposal and reclamation practices, including use of disposal firms.

Environmental Health Services Section staff shall annually review the progress of health care facilities regarding compliance with this policy and note such progress in the annual comprehensive environmental health survey for each facility.

5.	EFFECTIVE DATE: This Policy is effective upon date of signature by the Area
	Director, BAIHS.
	Date:

Kathleen Annette, M.D. Area Director Bemidji Area Indian Health Service